In the etiology of typhoid fever the doctrine of contagion and that of infection are both too exclusive. The doctrine of its fecal origin does not correspond with the universality of the facts. The doctrine of spontaneous development is not proved. Typhoid fever is a specific, miasmatic disease.

In its production it so happens that the morbific matter coming, we know not whence, but not necessarily from an infected organism, is capable of developing itself in animal matters which become then a focus of infection, and in the living human organism a focus of contagion. The contagion is almost always mediate.

The morbific matter arising from foci of infection, or of contaminated individuals, may contaminate the air, the soil, or the water. This morbific matter may be disseminated by men, by the contaminated objects, by the air, and especially by drinking water. The influence of reservoirs and of defective sewers, neglected or badly constructed, is shown, whether regarded as agents of infection or of mediate contagion. The influence of variations of the level of the subterraneous sheet of water is not clearly established.

Diphtheria complicating Enteric Fever.

At a late meeting of the Pathological Society of London (*Lancet*, Nov. 10, 1877), Dr. GREENFIELD showed a recent specimen of diphtheritic false membrane in the larynx and pharynx from a case of enteric fever. The case was that of a child, five years of age, who had been in St. Thomas's Hospital under the care of Dr. Murchison for about fifteen days. There was swelling and slight ulceration of Peyer's patches and solitary glands at the lower part of the ileum, the ulcers being small, round, and sharply excavated. In the larynx, upper part of trachea, and posterior surface of the palate and fauces, there was a thin layer of false membrane and muco-purulent secretion. The exudation was met with about the posterior nares and the orifices of the Eustachian tubes; but there was none on the anterior surface of the palate. Dr. Greenfield remarked that ulceration of the small intestines had been described in diphtheria, and he had often seen swelling of the solitary glands of the ileum in that disease; but the present was undoubtedly a case of enteric fever, and the questions raised by the case were, first, what was its relation to true diphtheria, and next whether diphtheria exists as a distinct specific disease at all.

Dr. MURCHISON said the patient in question was under his care at the hospital. The case was one of enteric fever in about the third week. Another child in the same family had recently had an abortive attack of enteric fever. In the present case laryngeal symptoms came on two days before death. No membrane could be seen on the fauces, which, with the tonsils, were red and swollen; and he hesitated to say whether the case was one of diphtheria complicating typhoid, or one of the other laryngeal complications that may occur in that disease. In addition to the laryngeal symptoms, there were signs of consolidation of the lungs. A form of diphtheria which he was in the habit of regarding as different from true diphtheria was not an unusual complication of enteric fever, and more often of typhus and scarlet fevers. Such cases occurred at the Fever Hospital, where it was curious that very few cases of diphtheria itself were admitted.

Dr. F. SÉMON had seen, both here and in Germany, cases of diphtheria complicating typhoid; and, as a rule, in such cases, the diphtheritic inflammation begins in the larynx and spreads upwards, but does not affect the upper part of the pharynx.

Dr. MURCHISON added that even when the laryngeal symptoms were severe, there had been no difficulty in swallowing. One of the members of the family had died of enteric fever. In reply to Mr. Pugin Thornton, he said that as a rule the complication occurred about the third or fourth week of the fever.

Dr. Clifford Allbut remarked that diphtheritic complications of typhoid fever seemed to occur in some epidemics and not in others. He had been led to the opinion that there was some relation between enteric fever and diphtheria, partly from the above fact, and partly because diphtheria springs up in the same localities as typhoid does, and under similar conditions. He instanced the occurrence of an epidemic of diphtheria in a Yorkshire village being shortly followed by an epidemic of typhoid.

The Therapeutics of Diphtheria.

Mr. J. Graham Brown, Senior President Royal Medical Society, Edinburgh, publishes in the *Journal of Anatomy and Physiology* (Oct. 1877) a series of experiments which he performed in Prof. Klebs's laboratory in order to ascertain what drugs seemed to have an influence over the diphtheritic process. His detailed experiments seem to indicate,—

(1.) That the contagious fluids of diphtheria are rendered powerless to propagate the local disease after mixture for a longer or shorter time with solutions of hydrochlorate of quinia, salicylate of soda, and benzoate of soda.

(2.) That the most powerful of these three is benzoate of soda.

(3.) That the administration of benzoate of soda hypodermically, previous to the inoculation of diphtheria, has a power of preventing the establishment of the disease; but that this protection only extends to a certain length.

Mr. Brown very properly remarks that it would be very rash to suppose that any one of these points has been firmly established by the amount of evidence which is contained in this research. There are so many sources of error ever present as to preclude such a possibility. Still, however, the *uniformity of the results* obtained is so striking as to increase greatly their value.

On the Use of Iron in Epilepsy.

Dr. W. R. Gowers, Assistant Physician to University College Hospital, in an interesting article on this subject (*Practitioner*, Oct. 1877), thus summarizes the important facts regarding the use of iron in epilepsy:—

1. In a certain proportion of cases of epilepsy, which are probably a minority of the whole group, iron does increase the frequency and severity of the fits.
2. In a large number of cases iron may be given without any recognizable influence on the attacks.
3. In many of the cases in which its effect is injurious, the increase in fits does not occur until after the iron has been taken for some weeks, and in some of these cases the first effect of the drug is to cause a diminution in the frequency and severity of the attacks.
4. In some cases this beneficial effect, instead of being transient, is permanent; and great benefit results from the continued administration of iron, so that by its use alone some cases may be cured, as far as the affection can be said ever to be cured by drugs.

With regard to the indications for the use of iron, Dr. Gowers thinks that it is certainly most frequently useful in the anomalous forms of epilepsy which stand midway between epilepsy and hysteria, and have long been known by some mixed term, and in which co-ordinated and apparently purposive spasmodic movements are part of the phenomena of, or commonly succeed, the "epileptic" portion of the attack. Whatever be the exact nature of these cases, many are certainly benefited in a remarkable degree by iron. The cases narrated show, however, that it may also do good when the attacks are of a more purely epileptic type. Anæmia, as an indication for the use of iron, is, Dr. Gowers thinks, of